ASSESSMENT OF PRELOADING OPERATIONS AND CONDITION OF CATTLE LOADED AT INTERNATIONAL CATTLE MARKET, IBADAN, NIGERIA

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ABSTRACT
Loading and offloading exercise if not properly carried out with appropriate equipment can make cattle sustain injuries which can eventually make them emaciate and lose economic value. The study was carried out to assess the condition of cattle loaded for transportation in Akinyele international Cattle Market Ibadan for five consecutive weeks from 7.00am–7.00pm by direct observation with the aid of checklist, camera and recorder. Vehicle-type, ramp-usage, cattle status (standing-DbW or wheeled/carted-DbC) and body condition score-BCS of cattle were assessed. Data were analysed using descriptive statistics (SPSS 20). The study revealed that six types of vehicles were used for transportation and all (100%) cattle were loaded without ramp. Articulated Nissan Cabster (67.7%) was mostly used for transportation while the least was (Articulated Short Trailer) (0.4%) popularly called Caster and single, respectively. A total of 8393 cattle was loaded and Sokoto Gudali was the highest (35.7%) while Kuri the least (6.3%). For cattle status, 38.4% male were delivery by walk (DbW) while 4.5% were delivery by cart (DbC). Also, 46.7% female were DbW while 10.4% were DbC. White Fulani had the highest for both male and female cattle DbC at 37.4% and 39.5%, and Kuri was least for male (3.2%) and female (6.3%). Of the total cattle loaded, 21.5% had 1-2-BCS while 78.5% had 3-5 (BCS). Emaciated females (BCS 1-2) were 15.4% while 6.06%) were males. Loading activities at the study area was inappropriate and some of the cattle transported were observed to lack the stamina to be transportation.
Keywords: loading, Body condition score, cattle status, ramp usage

INTRODUCTION

Transportation of cattle is said to be one of the most stressful event in an animal's life. Transportation as a whole is inclusive of all activities before and after movement of animals in vehicle. Loading and offloading of cattle could be stressful especially in developing countries like Nigeria. This is because; cattle are mostly loaded into vehicles without the use of ramp or appropriate devices, which could constitute stress of handling both to the animals and the handlers. Tirant and Grandin (2000) recommended that animals should be loaded and unloaded with the use of mechanical lifter, ramps or stairs to reduce the stress of handling.

Cattle that are emaciated or cannot stand on hoof are unfit for transportation and are mostly carried to vehicles with the aid of cart (*omolanke*) and were at times dragged forcefuly into the vehicles. Cattle aided for loading might be physically challenged or have internal injuries or ailments. Emaciation is a common illness in food animals that is described by a loss of lipids and meat as a result of starvation or loss of appetite, with the organs and muscular tissues appearing thinner, wetter, and shinier (FAO, 2001). Extreme emaciation is a valid reason to consider an animal a "suspect," and a later in-depth inspection should be conducted since it is a sign of a major underlying infection that affects the quality of meat and carcass, nutritional value, and offers a health risk to customers (FAO, 2001). Documented data on loading pattern and status of cattle in Nigerian cattle market is limited. Therefore, the study was carried out to assess the pre-loading operations and status of cattle loaded and transported out of Akinyele international cattle market Ibadan.

MATERIALS AND METHODS

Akinyele International Cattle Market (AICM) Akinyele LGA, Ibadan, Oyo State, Nigeria was used for the study. Akinyele is located about 19 kilometers north on the Ibadan – Oyo road in 7.5309^{o} N latitude and 3.9110^{o} E longitude with annual rain fall of 1,250mm. The study area was purposively

selected due to its centrality to the south western states and with its significant high population of cattle. The study was carried out for a period of five consecutively weeks from Monday to Sunday every day of the week. All cattle loaded out of the study area within 7am-7pm daily were assessed by direct observation with the aid of checklist, measuring tape, camera was used to obtain relevant information on ramp usage (The number of vehicles that loaded cattle with or without the use of ramp and the frequency of usage was recorded.), status of cattle (those Delieverd by Cart or Delievered by walk), and body conditions score of the cattle were determined using the adapted Canadian scale of 1 to 5 score (1-2 score suggests the animal is emaciated or rickety, while score 3-5 suggests the animal is fleshy or meaty). Data obtained were analysed using descriptive statistics SPSS 20.

RESULTS AND DISCUSSION

The usage of ramp at AICM is shown in Table 1. The result showed that 6 different types of vehicle were commonly used for loading cattle out of AICM with the highest (67.7%) among the Caster (Articulated Nissan Cabstar) and the least (0.7%) among the single (articulated short trailer). Minka and Ayo, (2007) reported that animals are consistently transported on bad motorable road and in vehicles that are meant for passengers and goods(open trailers, trucks, pick-ups) and something alongside passengers in them. It was also observed that all (100%) of the vehicles did not used ramp or mechanical lifter for loading cattle. Handlers numbering 4-5 were seen loading cattle into vehicles using the bundling method with the help of ropes to push and pull cattle into the different vehicles. The bundling method was noticed to be stressful for both the handlers and the animals. It was observed that most of the vehicles used for transportation in the study area did not measure up to the height of the available ramp which could be reason why ramp is not used.

Table 4. Ramp usage for loading cattle in Akinyele International Cattle Market, Ibadan

Vehicle type	Ramp	Number of Vehicle	% number of Vehicle
Pickup	Used	-	
	Not used	746	23.9
Caster	Used	-	
	Not used	2115	67.7
Golf	Used	-	
	Not used	103	3.3
Hilux	Used	-	
	Not used	125	4.0
Bus	Used	-	
	Not used	23	0.7
Single	Used	-	
	Not used	13	0.4
Total		3125	100

Source: Field survey

This practice is not in line with the report of Temple Grandin (2022) that in ramp must be used on vehicles higher than a stock trailer and that dropping an animal from a height of more than 12 inc (30 cm) is forbidden

It was observed that there were only two ramps available at the study area and is located at the offloading section. The ramps were observed to be old and dilapidated even though they are sometimes used for offloading cattle. Loading and offloading cattle without the use of ramp and transporting them with vehicle meant for goods and passangers which are common practice observed in the market may be a serious abuse of animal welfare and should be discouraged. The use of ramp is expected to ease stress on the animals and also the cattle handlers. Ramp use for loading and offloading are also meant to prevent injuries of animals during. This will reduce the effect of bundling of cattle by able bodied men and tying of ropes which could lead to sustained injuries on the neck of cattle. Tirant and Grandin (2000) recommended that animals should be loaded and unloaded with the use of mechanical lifter, ramps or stairs to reduce the stress of handling.

Presented in Table 2 is the status of cattle loaded out of Akinyele International Cattle Market. The study revealed that of the 8393 cattle loaded into several vehicles, 38.4% male cattle were delivery by walk (DbW) while 4.5% were delivery by cart (DbC). Also, 46.7% female cattle were DbW while 10.4% were DbC. The delivering of cattle by cart to vehicles for loading could be an indication that the animal is not in a good physiological or anatomical state of health. Some cattle were observed to have sustained leg and neck injuries which could have affected their ability to stand on hoof. Transporting cattle in that state of health might not be appriopprate except for medical intervention. The observation of Cattle unable to walk (DbC) is in line with the category of unfit cattle described by Temple Grandin (2022), he reported that unfit cattle include cattle that cannot walk, have severe lameness that make walking difficult or are emaciated and weak. He further recommended that truck drivers should refuse to transport animals that are unfit. SokotoGudali was the highest loaded (35.7%) while Kuri was the least (6.3%). This could be because SokotoGudali is more populated in the market than other breeds of cattle. Among male cattle delivery by walk (DbW), SokotoGudali male had the highest (33.7%) while Kuri had the least (4.7%). However, for the male cattle delivery by cart (DbC), White Fulani cattle had the highest value (37.4%) while Kuri maintained the least (3.2%). For the female loaded, SokotoGudali (40%) had the highest cattle DbW with the least among Kuri (7.0%). However, for cattle DbC, White Fulani were the most DbC (39.5%) while Kuri the least (6.3%). The white Fulani cattle delivered by cart could be the weak, injured or recumbent ones because White Fulani are known to be strong and rugged.

Table 2: Status of cattle loaded in vehicles at Akinyele International Cattle Market, Ibadan

		Male		Female		
Breeds		DbW (standing)	DbC (carted)	DbW (standing)	DbC (carted)	Total
Sokoto Gudali	NoC	1089	94	1569	241	2993
	(%)	33.7	25.1	40.0	27.6	35.7
White Fulani	NoC	949	140	954	345	2388
	(%)	29.4	37.4	24.3	39.5	28.5
Red Bororo	NoC	1037	128	1091	227	2483
	(%)	32.1	34.2	27.8	25.9	29.57
Kuri	NoC	152	12	304	61	529
	(%)	4.7	3.2	7.8	7.0	6.3
Total	**NoC**	**3227**	**374**	**3918**	**873**	**8393**
	(%)		**(100)**	**(100)**	**100**	**100**
	NoC (%)	38.4	4.5	46.7	10.4	100

Source: Fields survey 2018 * NoC: Number of Cattle *Delievery by Cart *Delievery by Walk.

Oral interview with cattle handlers revealed that cattle were loaded taken for immediate slaughtering. This act might be against human welfare as the state of health of cattle that were carted into vehicles was not ascertained to ensure that they are fit for human consumption. Bello *et al*. (2015) reported that there are no *ante* and *postmorterm* inspection of animals in Nigerian abattoirs thus putting human health in jeopardy.

Shown in Table 3 is the Body Condition Score (BCS) of cattle transported from AICM. It was noticed that of the 8393 loaded, 21.5% cattle had 1-2 BCS while 78.5 had 3-5 (BCS). Most emaciated (BCS 1-2) cattle loaded were female (15.4) while the least were males (6.06%). Among the male cattle, Sokoto Gudali had the most emaciated cattle while Kuri the least. However, for meaty or fleshy cattle, Red Bororo had the highest while Kuri the least. For female BCS 1-2, and 3-5, Sokoto Gudali was the highest at 41.7% and 36.6% and the least is among the Kuri at 4.3% and 8.8%, respectively. Body condition score 1-2 could be an indication of cattle ill health or malnutrition since maintenance diet is mostly given at the market while they await buyers. Emaciated cattle should be investigated before sale, transportation and slaughtering. Temple Grandin 2022 reported that cattle that are unfit are more like to become non-ambulatory and that If a non-ambulatory animal has to be transported it should be placed in the rear compartment of a double deck trailer near the door or transported in a single deck vehicle. According to Animal welfare Act 2023, emaciated beef cattle must not be supplied for transport, loaded on a transport vehicle or offered for sale at saleyard. Under the transport regulations,

it is an offence for all persons involved in the process to consign or load beef cattle for transport, that are unfit to undertake the journey, whether from the property of origin, saleyard or other place.

Table 3: Body condition score of cattle transported from Akinyele International Cattle Market, Ibadan

		Male		Female		Total
Breeds		1-2 BCS	3-5 BCS	1-2 BCS	3-5 BCS	
SokotoGudali	NoC	183	1000	539	1281	2993
	(%)	36.0	32.3	41.7	36.6	35.7
White Fulani	NoC	169	920	411	888	2388
	(%)	33.2	30.0	31.8	25.39	28.5
Red Bororo	NoC	139	1026	297	1021	2483
	(%)	27.3	33.9	23.0	29.2	29.6
Kuri	NoC	18	146	56	309	529
	(%)	4.0	4.7	4.3	8.8	6.3
Total	**NoC**	**509**	**3092**	**1293**	**3498**	**8393**
	(%)	6.06	36.8	15.4	41.7	100

Source: Fields survey 2018 *NoC: Number of Cattle *Body Condition Score BCS

CONCLUSION

In Conclusion, loading was done without the use of ramp, some cattle were unable to walk and stand. Also, some were emaciated and unfit for transportation as their welfare seem to be compromise

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